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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY

In the Matter of)
Revision of the Commission's Rules)
to Ensure Compatibility with)
Enhanced 911 Emergency Calling Systems)

CC Docket No. 94-102
RM-8143

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To: The Commission

REPLY COMMENTS OF THE RURAL CELLULAR ASSOCIATION

The Rural Cellular Association ("RCA"), pursuant to Section 1.415 of the Commission's Rules¹ and in response to the Commission's *Report & Order and Further Notice of Proposed Rulemaking* ("*Report and Further Notice*"),² hereby submits reply comments on the issues raised therein. Participants in the most recent round of comments addressed the ability of rural wireless providers to support the triangulation location technique required by most Automatic Location Information ("ALI") technologies, as well as cost-recovery issues. RCA agrees with the Commission's determination that waivers be employed in rural areas where implementation of E911 requirements is not feasible, and urges the Commission to extend

¹/ 47 C.F.R. § 1.415.

²/ FCC 96-264 (released July 26, 1996).

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that waiver policy to any future enhanced requirements the Commission may adopt.³ In support thereof, RCA shows the following:

RCA is an association representing the interests of small and rural cellular licensees providing commercial services to subscribers throughout the nation. Its member companies provide cellular service to predominantly rural areas where more than 6 million people reside. RCA is an active participant in this docket, having submitted several sets of comments;⁴ RCA members also met with Commission staff in *ex parte* meetings held in April 1996.

I. Background

In the *Report*, the Commission established a two-phase schedule for the implementation of wireless E911 service. In Phase I, covered carriers will be required to relay a caller's Automatic Number Identification (ANI) and the location of the base station or cell site receiving a 911 call to the designated Public Safety Answering Point ("PSAP") if (i) the PSAP has requested the service and made the investment necessary to allow it to receive and utilize the data elements associated with the service, (ii) LEC

³/ *Report and Further Notice* at ¶84.

⁴/ See Comments of the Rural Cellular Association in CC Docket No. 94-102, filed January 9, 1995; Reply Comments of the Rural Cellular Association in CC Docket No. 94-102, filed March 17, 1995; and Comments of the Rural Cellular Association filed March 4, 1996 (comments on the "Public Safety-Wireless Industry Consensus: Wireless Compatibility Issues"). See also Comments of the Rural Cellular Association, in the Matter of Petition for Rulemaking of the Ad Hoc Alliance for Public Access to 911, CC Docket 94-102, filed December 15, 1995.

infrastructure will support the service, and (iii) a cost recovery mechanism is in place.⁵ In Phase II, carriers will be required to identify the longitude and latitude of a mobile unit making a 911 call within a radius of 125 meters with 67 percent accuracy.⁶

In the *Further Notice*, the Commission sought comment on, among other issues, a post-Phase II location standard that would require carriers to provide PSAPs with information that locates a wireless 911 caller within a radius of 40 feet, using longitude, latitude, and altitude data, with 90 percent accuracy.⁷

Given that the Commission previously recognized the impracticability of meeting even the 125-meter standard requirements in certain rural areas,⁸ RCA urges the Commission to extend its existing waiver policy to any post-Phase II standards it may adopt. The record in this proceeding supports this approach -- parties representing virtually every aspect of the wireless industry agree that rural systems are unable to support the proposed enhanced requirements to provide location to within 40 feet with 90 percent accuracy.

II. The Triangulation Technique Required by Most ALI Technologies Cannot be Performed in Many Rural Systems.

The triangulation technique required by most ALI technologies requires the existence of three densely erected, overlapping cell

⁵/ *Report and Further Notice* at ¶63.

⁶/ *Id.* at ¶71.

⁷/ *Id.* at ¶138.

⁸/ *Id.* at ¶84.

sites. As previously noted by RCA,⁹ most rural systems are engineered and constructed to exacting efficiency, such that a mobile customer is never within range of three different cell sites at the same time. Even in large rural areas which may boast three sites, the wide geographic separation of the sites often makes it impossible to provide information accurate to within the proposed 125-meter standard. Plainly stated, the 125-meter standard simply cannot be met in rural areas. As demonstrated below, this is a fact that has been recognized by representatives of virtually every interest represented in this proceeding: the Commission, service providers, and public safety organizations.

The Commission, when discussing the technological and economical feasibility of providing ALI in rural areas, provided explicitly for waivers from the 125-meter ALI requirements.¹⁰ The Commission stated that waivers will be employed where deployment is either technically or economically infeasible, or where cost recovery mechanisms for E911 particularly disadvantage a particular carrier.¹¹ The Association of Public-Safety Communications Officials-International, Inc. ("APCO"), National Emergency Number Association ("NENA"), and National Association of Nine-One-One Administrators ("NASNA") acknowledged in a Consensus Agreement filed with the Commission in February 1996 that some rural or

⁹/ See Comments of the Rural Cellular Association filed March 4, 1996 (comments on the "Public Safety-Wireless Industry Consensus: Wireless Compatibility Issues").

¹⁰/ *Report and Further Notice* at ¶84.

¹¹/ Id.

thinly-populated areas may have systems that, without augmentation at special expense, would not be able to deliver ALI with accuracy comparable to that proposed by the Commission.¹²

In subsequent joint comments, APCO, NENA, and NASNA addressed the special consideration rural areas warrant. Recognizing that vertical location requirements may be unnecessary in some rural areas, and that implementation "may be difficult to obtain in a cost-effective manner," these public safety organizations declared that they would "not oppose rules that eliminate the vertical data requirement in certain rural" areas.¹³ Ericsson, Inc. declared without equivocation that triangulation may not be possible in rural areas where, due to moderate capacity demands, overlapping coverage from multiple base stations may not exist.¹⁴ The American Mobile Telecommunications Association ("AMTA"), too, recognized the unique architecture of rural wireless infrastructure, stating that the proposed post-Phase II requirements "assume that all covered CMRS systems employ a common, grid-like system."¹⁵ As AMTA notes, many rural systems, by contrast, are "designed to provide optimal

^{12/} Report and Further Notice at ¶84, citing "Consensus Agreement" Between Wireless Industry Representatives and Public Safety Groups, CC Docket No. 94-102, DA 96-198, Feb. 16, 1996; 61 FR 6963 (Feb. 23, 1996).

^{13/} Comments of APCO, NENA, and NASNA at 3, 4.

^{14/} Comments of Ericsson, Inc. at 3.

^{15/} Comments of American Mobile Telecommunications Association at 4.

coverage for the subscriber base, rather than to achieve some hypothetical, chessboard-like pattern of transmitter symmetry."¹⁶

The record in this proceeding, comprising opinions of the Commission, service providers, and public safety organizations, supports the RCA position that rural systems cannot support implementation of the adopted 125-meter standard or, by logical extension, the more-stringent 40-foot radius proposal.

III. Conclusion

RCA respectfully submits that the record developed in this proceeding supports waivers for rural wireless providers from both E911 triangulation location requirements and the proposed 40-foot accuracy standard. RCA therefore urges the Commission to adhere to its position regarding waivers for rural areas, and apply that policy to any post-Phase II requirements the Commission may adopt.

Respectfully submitted,

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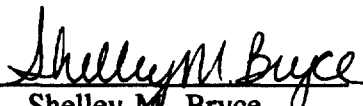
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October 25, 1996

¹⁶/ Id. at 4, 5.

CERTIFICATE OF SERVICE

I, Shelley M. Bryce, hereby certify that a copy of the foregoing Reply Comments of the Rural Cellular Association in CC Docket No. 94-102 was served on this 25th day of October 1996, by first class, U.S. mail, postage prepaid, to the parties on the attached pages.



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